



DPM 150-1

# MATERIAL SAFETY DATA SHEET



## LIQUID CARBONIC

INDUSTRIAL/MEDICAL CORPORATION

135 SOUTH LA SALLE STREET • CHICAGO, ILLINOIS 60603-4282  
PHONE: (312) 855-2500

LIQUID ARGON

04/86

Emergency Phone Numbers: (312) 855-2500; CHEMTREC (800) 424-9300

### SECTION I--PRODUCT IDENTIFICATION

CHEMICAL NAME: Argon

COMMON NAME AND SYNONYMS: Liquid Argon, LAR

CHEMICAL FAMILY: Inert Gas

FORMULA: A

### SECTION II--HAZARDOUS INGREDIENTS

MATERIAL	VOLUME %	CAS NO.	1985-6 ACGIH TLV UNITS
Argon	99.9	7440-37-1	Simple Asphyxiant

### SECTION III--PHYSICAL DATA

BOILING POINT (°F.)	-302.6°F	SPECIFIC GRAVITY (H <sub>2</sub> O=1)	1.39 @ B.P.
VAPOR PRESSURE (mmHg.) @ -302.6°F-760		% VOLATILE BY VOLUME	100.0
VAPOR DENSITY (AIR=1)	1.38	EVAPORATION RATE (BUTYL ACETATE=1)	N/A
SOLUBILITY IN WATER	Slight		
APPEARANCE AND ODOR	Colorless, Odorless		

### SECTION IV--FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED)	N/A	FLAMMABLE LIMITS	LEL N/A	UEL N/A
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EXTINGUISHING MEDIA: Non-Flammable Inert Gas

SPECIAL FIRE FIGHTING PROCEDURES: Non-flammable and will not support combustion.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Non-flammable, no unusual hazard except when container is exposed to a fire. Containers may rupture violently if safety devices fail to relieve pressure.

### SECTION V--HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: Argon is non-toxic and is classified as a simple asphyxiant by displacement of oxygen.

EFFECTS OF OVEREXPOSURE: Dizziness, unconsciousness, death.

EMERGENCY AND FIRST AID PROCEDURES: If inhaled, remove to fresh air. Administer air or oxygen. Obtain prompt medical attention. Give cardiopulmonary resuscitation. Rescuers need to be concerned with their own safety in oxygen deficient areas. Use self-contained breathing equipment. For skin contact or frost bite, flush affected area with luke warm water. Do not use hot water. For serious cryogenic burn, see a physician immediately.

ROUTE(S) OF ENTRY?      INHALATION?      SKIN?      INGESTION?

CARCINOGENICITY NTP? No      IARC MONOGRAPHS? No      OSHA? No

## SECTION VI--REACTIVITY DATA

STABILITY: UNSTABLE ( ) STABLE (X)

CONDITIONS TO AVOID: N/A

INCOMPATIBILITY (MATERIALS TO AVOID): Inert, will not react with other substances.

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION: MAY OCCUR ( ) WON'T OCCUR (X)

CONDITIONS TO AVOID: N/A

## SECTION VII--SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Evacuate all personnel from affected area. Do not touch liquid argon. Maintain adequate ventilation to avoid oxygen deficiency.

WASTE DISPOSAL METHOD: No waste disposal problem. Gas will diffuse into atmosphere.

## SECTION VIII--SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Self-contained breathing apparatus or pressure demand air supply mask.

VENTILATION: LOCAL EXHAUST (X) To prevent O<sub>2</sub> concentration in air from  
MECHANICAL (GENERAL) ( ) being reduced to below 18% by volume.

PROTECTIVE GLOVES: Loose-fitting, insulated. EYE PROTECTION: Safety goggles or glasses plus face shield.

OTHER PROTECTIVE EQUIPMENT: Safety shoes,  
low oxygen alarm (less than 18%) where necessary

## SECTION IX--SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Protect containers from physical damage. Use only approved storage vessels. Follow all the safety rules related to cryogenic fluid.

OTHER PRECAUTIONS: Refer to CGA Safety Bulletin SB-2 and pamphlets P-9, P-12, and P-14.

SB-2 -- "Oxygen Deficient Atmosphere"

P-9 -- "The Inert Gases, Argon, Nitrogen, and Helium"

P-12 -- "Safe Handling of Cryogenic Liquids"

P-16 -- "Accident Prevention in Oxygen - Rich  
and Oxygen - Deficient Atmospheres"

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